

## **SUNFLOWER ARMY AMMUNITION PLANT**

**KANSAS**

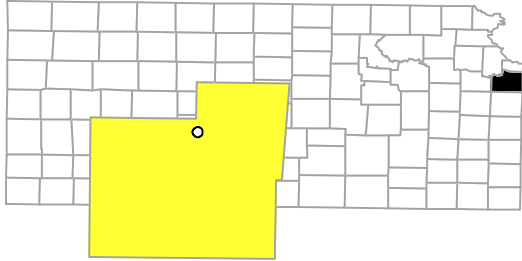
**EPA ID# KS3213820878**

**EPA Region 7**

**City: DeSoto,  
25 miles southwest of  
Kansas City**

**County: Johnson County**

**Other Names:**



## **SITE DESCRIPTION**

The 9065-acre Sunflower Army Ammunition Plant is a government-owned, contractor-operated military installation. The installation began operations in 1942 to manufacture smokeless powder and propellants for small arms, cannons, and rockets. Additional facility operations included the manufacture and regeneration of nitric and sulfuric acids, and munitions proving. Since 1971, the majority of the installation has been in a standby, inactive status, with the last production operation (nitroguanidine) ceasing in 1992. Many of the undeveloped areas of the property are currently leased for livestock grazing and hay production line areas, magazine storage areas, and approximately 50 solid waste management units (SWMUs). The SWMUs include surface impoundments, ditches, sumps, munitions proving ranges, burning grounds, and landfills. Throughout operational history, various liquid discharges from the facility have been permitted under the federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES).

The facility owner (Department of the Army) declared the installation excess during early 1998, and the facility operator (Alliant Techsystems, Inc.) is in the process of removing the majority of the industrial infrastructure remaining at the site, including explosives contaminated structures and equipment. Future use of the installation is uncertain, although efforts are underway to facilitate development and reuse of available land, buildings, and usable infrastructure. A wide variety of projects have been considered, including single- and multi-family residences, parks, small business, light industry, and manufacturing. Currently, the United States General Services Administration is negotiating transfer of the entire site to the Kansas Statewide Department Cooperation, who would transfer the site to a third party developer, OZ Entertainment Corporation, who would begin development of the site, including a proposal for a destination theme park, golf course, trailer camp ground and hotel.

Surrounding land use in this sparsely populated, rural area is primarily agricultural, although urban growth is encroaching from the nearby city of Desoto. The facility is situated on a broad ridge,

with most of the installation lying between two streams: Captain Creek on the west and Kill Creek on the east. The state of Kansas has designated Kill Creek as a fishery downstream of the installation, and the creek is a tributary of the Kansas River, a state designated drinking water supply. The federal endangered Pallid Sturgeon (*Scaphirhynchus albus*) occurs in the Kansas River, Kill Creek, and Captain Creek are habitat for the state threatened Flathead Chub (*Hybopsis gracilis*). EPA included the facility in the February 13, 1995, Federal Register notification of proposed additions to the National Priorities List (NPL), having received a score of 50 through the Hazard Ranking System (HRS) based on a single exposure pathway and surface water.

EPA policy allows the deferral of action at sites eligible for the NPL to other EPA cleanup programs. Sunflower Army Ammunition Plant was issued a Resource Conservation and Recovery Act (RCRA) hazardous waste storage permit on September 30, 1991. That permit consist of two parts. Part I is issued by the Kansas Department of Health and Environment to authorize the storage of certain hazardous wastes for greater than 90 days. Part II is issued by EPA for regulations which KDHE has not been authorized to implement in lieu of EPA such as those requiring investigation and cleanup of releases of hazardous waste and hazardous constituents from solid waste management units. EPA believes these requirements in Part II of the RCRA permit are sufficient to cleanup the site.

#### Site Responsibility:

These actions are required by the RCRA hazardous waste management permit issued by EPA.

#### NPL LISTING HISTORY

**Proposed Date:** 02/25/95

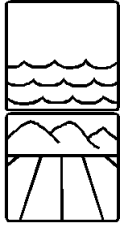
**Final Date:**

**Deleted Date:**

## THREATS AND CONTAMINANTS

**Description:** Data gathered through site investigations to date have documented elevated concentrations of one or more of 89 separate chemicals of potential concern in soil, sediment, ground water, surface water, and various biological receptors. Source areas are categorized as: N-5 Propellant Production site (11), Nitroguanidine Production sites (12), Landfill sites (6), Waste Treatment sites: Propellant Wastes (6) other wastes (6) Support Area sites (8), and Single Base Propellant Area (1) unit consisting of multiple sumps. A Grazing Study identified dioxins/furans in surficial soil and vegetation in non-solid waste management unit areas, some of which were included in current agricultural leases. Although analysis of these data and modeled concentrations in beef indicated little to no appreciable risk from this pathway, cattle no longer are allowed to graze in these areas.





## CLEANUP APPROACH

### Response Action Status

**Immediate Actions:** The EPA, under the authority of the Resource Conservation and Recovery Act (RCRA), has been monitoring groundwater, periodically inspecting and maintaining the facility, and developing a RCRA Facility Investigation. The Army under its Superfund Authority, has been burning explosives contaminated structures.

**Entire Site:** The Army has begun a study of the nature and extent of the contamination throughout the site. This study will define the various areas of contamination and to develop appropriate cleanup alternatives for each area. Four solid waste management units have had all investigations completed. EPA has proposed a corrective action for these areas. Reading are referred to the Statement of Basis, dated September 28, 1999 for a discussion of these areas and EPA's preferred corrective measure.

### Description:

**Site Facts:** Site Facts: In 1971, the EPA levied a fine against the facility for the accidental release of ammonia to Kill Creek that resulted in a fish kill. Sunflower Army Ammunition Plant is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DOD) in 1978 to identify, investigate and control the migration of hazardous contaminants at military and other DOD facilities.

## ENVIRONMENTAL PROGRESS



A significant amount of progress has been made regarding the investigation of contamination at SFAAP. Of the 53 SWMUs identified at the facility, draft RFI reports have been submitted for all of these units by the end of fiscal 1998. Review of the documents submitted to date has facilitated the resolution of ten draft RFI reports and the development of recommendations for further action or no action at each of these units. In addition, several site-wide efforts will have been finalized by the end of July 1998 including: background investigation report, groundwater/geological/hydrological investigation report, ecological risk assessment report, grazing study report, and general approach for human health risk assessment. Further investigation is required at a number of units, and the facility is pursuing funding to accomplish these activities. Cleanup progress at several units have been accomplished through interim measure (removal) and RCRA closure activities. SWMUs 28 and 29 were closed as RCRA regulated units prior to 1995, and SMWU 23 will be closed during 1998. SWMUs 13 and 37 were closed during 1996 in cooperation with the KDHE Bureau of Water AOC regarding treatment of industrial wastewaters contained in these units. At SWMU 50, an interim measure implemented during 1997, which applied a presumptive remedy for landfills, will likely result in final closure of that unit in 1998. Currently, the facility is using ARMS funding to re-deploy the installation's physical property and real property, and Kansas State University and Johnson County Park and Recreation District each have large (i.e., 300-400 acres) lease proposals pending with the facility. In addition, as the facility moves into an excess status owing to the withdrawal of its mission, the applicability of section 120(h) of CERCLA, and specifically the subsection 334 Defense Authorization Act of 1997 requirements regarding transfer of contaminated parcels will be significant issues requiring Agency oversight.

## SITE REPOSITORY



Johnson County Public Library  
Desoto Branch  
33145 W. 83rd  
Desoto, KS 66018

Superfund Records Center  
901 N. 5th St.  
Kansas City, KS 66101  
Mail Stop SUPR  
(913)551-4038

## REGIONAL CONTACTS

**SITE MANAGER:**

**E-MAIL ADDRESS:**

Ken Herstowski  
herstowski.ken@epa.gov  
(913) 551-7631

**COMMUNITY INVOLVEMENT**

**COORDINATOR:**

**PHONE NUMBER:**

Dana Blubaugh  
(913) 551-7577

**PUBLIC INFORMATION CENTER:**

**E-MAIL ADDRESS:**

**STATE CONTACT:**

**PHONE NUMBER:**

Randy Carlson  
(785) 296-1682

## MISCELLANEOUS INFORMATION

**STATE:**

**PACIFIC ISLAND(S):**

**CONGRESSIONAL DISTRICT:**

**EPA ORGANIZATION:**

Z4  
03  
SFD-SUPR/FFSE

## MODIFICATIONS